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**REMARKS/ARGUMENTS** 

Claims 1-20 are pending in this application. By this amendment, claim 21 has been

added.

The Examiner has rejected claims 1-6 and 18-19 under 35 U.S.C. 102(b) as being

anticipated by Jung et al. (U.S. Patent No. 5,978,030). The Examiner has also rejected

claims 1-5, 7, 9, 11, 13-14 and 18-20 under 35 U.S.C. 102(b) as being anticipated by Jung

et al. (U.S. Patent No. 5,654,761). The Examiner has also rejected claims 8, 10, 12 and 15-

17 under 35 U.S.C. 103.

Applicant appreciates the Examiner's review of Applicant's arguments in the

Response of February 3, 2005 and Examiner's comments in the Advisory Action mailed

October 18, 2005. However, Applicant respectfully disagrees with the Examiner's position.

In this section, Applicant reiterates and expands on the previously presented

arguments for reconsideration by the Examiner.

Applicant submits that, roughly speaking, Jung '030 and Jung '761 include three

types of frames: a reference frame (which can also be considered a previous frame, and

may be a reconstructed reference frame), a current frame and a predicted current frame.

Motion vectors are only obtained between a reference frame and a current frame in, for

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example, motion compensation device 150 of Jung '030, while an error signal is only

obtained between a predicted current frame and a current frame, in, for example, subtractor

102 in Jung '030.

In the present claim 1, it is clear that positional information on the corresponding

points and difference data on attribute values of the corresponding points both relate to the

first image and the second image. Since the corresponding point file is generated based on

the matching between the first image and the second image, the difference data on

attribute values, which is in the corresponding point file, is also based on the matching

between the first image and the second image. If the difference data is based on this

matching, the difference data must relate to the first image and the second image. Thus,

the first and second images (and the difference data therefor) of the present claims can

only correspond to one of: (a) the set of the current frame and the reference frame or (b)

the set of the current frame and the predicted current frame from the Jung references.

Even if we assume that the first image and the second image of the independent

claims in the present invention correspond to the reference frame and the current frame of

the Jung references and that motion vectors correspond to positional information and error

signals correspond to difference data, there is a clear difference between the present

invention and the Jung references. In the present invention, difference data on attribute

values of the corresponding points between the first and second images is included in the

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corresponding point file whereas in the Jung references, there is no error signal (difference

data) calculated between the reference frame and the current frame. In the Jung

references, difference data is only calculated between the predicted current frame and the

current frame. Since this set of frames is different from the set of reference frame and

current frame they cannot also correspond to the first frame and the second frame in claim

1 of the current application.

On the other hand, even if we assume that the first image and the second image of

the present invention correspond to the predicted current frame and the current frame,

there is a similar difference between the present invention and the Jung reference. In the

Jung references there are no motion vectors calculated between the current frame and the

predicted current frame whereas in the current application positional information of the

corresponding points is generated between the first and second images.

In the recent Advisory Action, the Examiner argues that motion compensation occurs

between an original reference frame and a current frame. Applicant generally agrees with

this characterization but with the minor exception that Applicant submits that the

determination of corresponding points are not determined for every point on a pixel by pixel

basis (see col. 2, lines 30-41, where Jung '030 teaches away from this concept). The

Examiner then argues that the predicted current frame includes both positional information

on the corresponding points and difference data on attribute values of the corresponding

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points, wherein the positional information is generated between the reference frame and

the current frame while the difference data is generated between the predicted current

frame and the current frame (i.e. the positional information and difference data are obtained

using two different sets of images).

As indicated above, Applicant believes that the language of claim 1 indicates that the

difference data is obtained from the same first image and second image for which the

positional information is obtained. As such, claim 1 is believed to be in condition for

allowance.

New claim 21 has been added as alternative wording for existing claim 1 that may

serve to clarify Applicant's interpretation of current claim 1. Applicant submits that new

claim 21 has the same scope of claim 1 and is in condition for allowance.

Further, in the Jung references, the motion vectors are obtained to allow a predicted

frame to be made from a reference frame and the error signal is obtained to allow the

predicted current frame to be corrected such that it is closer to the current frame. This is in

contrast to the current application, in which corresponding points (including positional

information and difference data) are obtained to allow interpolation between the first and

second images using only the first image and the corresponding point file. Thus, the

objectives of the Jung references and the present application are significantly different and

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would have different results. Since the error signal in Jung is between the current frame

and the predicted current frame, it is useful in adjusting the predicted current frame once

created but is not useful in an interpolation between the reference frame and the current

frame. In the present application, because the difference data is between the first image

and the second image, an interpolation can be performed that is based on the difference

data as well as positional information.

In this regard, Applicant submits that the Jung references do not teach or suggest an

interpolation that involves generating intermediate frames by using a difference value of a

pixel attribute between a first and second image to adjust that pixel attribute for

intermediate frames. In particular, Applicant submits that the Jung references do not teach

or suggest "acquiring a corresponding point file which describes a matching result of a first

image and a second image wherein the corresponding point file comprises positional

information on points which correspond between the first image and the second image and

difference data of attribute values of points which correspond between the first image and

the second image; and generating an intermediate image based on the first image and the

second image by performing interpolation on the first image and the corresponding point

file" as claimed in, for example, independent claim 4. As such, applicant submits that claim

4 is in condition for allowance.

For at least similar reasons to those given above, independent claims 5, 7, 14 - 17

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are also believed to be in condition for allowance. Also, for similar reasons, and the additional features contained therein, dependent claims 2-3, 6, 8-13, 18-20 are also believed to be in condition for allowance.

## **Conclusion:**

In view of the foregoing amendments and remarks it is respectfully submitted that this application is in condition for allowance. Favourable consideration and prompt allowance are earnestly solicited.

Respectfully submitted,

Ralph A. Dowell

Registration No. 26,868

Dowell & Dowell, P.C.

2111 Eisenhower Avenue, Suite 406

Arlington, Virginia 22314

Telephone (703) 415-2555 (703) 415-2559

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